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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,515	01/21/2000	Surya Prakash	06618-408001	5938
20985	7590	10/06/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			MERCADO, JULIAN A	
			ART UNIT	PAPER NUMBER

1745

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/489,515

Applicant(s)

PRAKASH ET AL.

Examiner

Julian Mercado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 19-27 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-27 and 29-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Remarks*

This Office action is responsive to applicant's amendment filed July 13, 2005.

This Office action maintains the prior ground(s) of rejection set forth in the prior Office action, but is made NON-FINAL to allow correction of the statutory grounds for rejection of claims 24 and 31.

Claims 19-27 and 29-31 are pending.

### *Claim Rejections - 35 USC § 102 and 103*

The rejection of claim 18 under 35 U.S.C. 102(b) based on Narayanan et al. is deemed moot in view of this claim being canceled.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 26 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Prakash et al. (U.S. Pat. 6,444,343 B1)

The rejection is maintained for the reasons of record. The examiner once again notes that claim 26 recites a product-by-process limitation of the providing, applying and bonding of a catalyst ink. For the reasons set forth in the prior Office action, these process limitations have not given patentable weight as the limitations do not give breadth or scope to the product claim.

Applicant's arguments have fully considered, however they are not found persuasive. Applicant submits that Prakash et al. do not teach a catalyst ink containing polyvinylidene fluoride. This argument is not persuasive as it is maintained that the fuel cell taught by Prakash et al. is the same as that claimed by applicant insofar as being a fuel cell comprising a catalyzed membrane electrode assembly with a PSSA/PVDF membrane. Applicant's arguments do not assert any differences that may be obtained by providing a catalyst ink containing polyvinylidene fluoride, especially in view of the membrane in Prakash et al. being comprised of PVDF, i.e. polyvinylidene fluoride itself.

Claims 19, 20 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grot et al. (U.S. Pat. 5,919,583) in view of Fleisher et al. (U.S. Pat. 5,643,689).

The rejection is maintained for the reasons of record. The examiner maintains that the skilled artisan would find obvious to employ a PSSA-PVDF membrane based on Grot et al.

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specifically teaching that the binder is preferably *the same polymer* as in the membrane, while Fleisher et al. teaches a PVDF polymer combined with a PSSA polymer. (emphasis added)

Applicant's arguments have been fully considered, however they are not found persuasive. Applicant submits that the membrane taught in Fleisher et al. is different than the instant PVDF-PSSA membrane in that the instant membrane is alleged to contain PSSA crosslinked within a PVDF matrix. As applicant did not provide page and line citations to the specification in support of this feature, a review of the specification appears to show that the claimed PSSA-PVDF is merely a *composite* of PSSA and PVDF. (emphasis added, see specification on page 1) Notwithstanding the apparent lack of support for this feature, crosslinking of PSSA with PVDF is also noted to be outside the scope of the present claims.

Claims 21, 22, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grot et al. in view of Fleisher et al., and further in view of Cabasso et al. (U.S. Pat. 5,783,325).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grot et al. in view of Fleisher et al., and further in view of Kindler (U.S. Pat. 5,992,008).

Claims 24 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grot et al. in view of Fleisher et al., and further in view of Lawrance et al. (U.S. Pat. 4,272,353).

Arguments against Cabasso et al., Kindler and Lawrance et al. appear to be directed to these references failing to remedy alleged differences between Grot et al. in view of Fleisher et al. and the present claims. However, as Grot et al. in view of Fleisher et al. is maintained for the reasons discussed above, the rejection(s) further in view of Cabasso et al., Kindler or Lawrance et al. is subsequently maintained for the detailed reasons discussed in the previous Office action.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to be 'Julian', with a large, loopy flourish underneath.

PATRICK JOSEPH RYAN  
SUPERVISOR, PATENT EXAMINER